Welcome to the 10th Anniversary Angioma Alliance CCM Scientific Meeting

Bethesda North Marriott Hotel & Conference Center November 6-7, 2014
Day 1 | Thursday, November 6th, 2014

8:00  Registration Check in & Continental Breakfast, *White Oak A Conference Room*
8:55  Welcome – Amy Akers, Angioma Alliance

**SESSION I | THERAPEUTIC TARGETS AND PRECLINICAL STUDIES IN CCM**

Moderator – Doug Marchuk, Duke University

9:00  *Targeting mTOR Signaling for the Treatment of Stroke*
    Joanne Chan, Hampton University

9:20  *Novel insights into the role of oxidative stress in CCM pathogenesis*
    Francesco Retta, University of Torino

9:40  *B-Cell Depletion Decreases Lesion Burden in a Murine Model of CCM Disease*
    Changbin Shi, University of Chicago

10:00  **COFFEE BREAK**

10:10  *β-catenin signaling in CCM3 null endothelial cells contributes to Cerebral Cavernous Malformation pathology*
    Luca Bravi, IFOM

10:30  *A Comparison between Fasudil and Simvastatin Treatment in Two Murine Models with CCM*
    Robert Shenkar, University of Chicago

10:50  30-Minute Discussion

11:30  **LUNCH & SPECIAL GUEST SPEAKER**
    *WHITE OAK B*

    *Drug Development in an Academic Lab*
    Susan Slaugenhaupt, Massachusetts General Hospital/Harvard Medical School

**SESSION II | GENETIC & CLINICAL VARIATION IN CCM**

Moderator – Helen Kim, University of California San Francisco

12:40  *PDCD10 Gene Mutations in Multiple Cerebral Cavernous Malformations*
    Silvana Penco, Niguarda Hospital

1:00  *Polymorphisms in DNA mismatch repair genes associated with severity of cerebral cavernous malformation type 1*
    Helene Choquet, University of California at San Francisco

1:20  *Adrenal Gland Calcifications Associated with Familial Cerebral Cavernous Malformations in Carriers of the CCM1 Common Hispanic Mutation*
    Corinne Strickland, Beth Israel Deaconess Medical Center

1:40  15-Minute Discussion

**Session III | Clinical Research Tools - Biomarkers & Clinical Guidelines**

Moderator – Issam Awad, University of Chicago

1:55  *Correlation of Quantitative Susceptibility Mapping in Cerebral Cavernous Malformations with Clinical and Conventional MRI Features*
    Huan Tan, University of Chicago
2:15  Proposed Methodology for the Development of Guidelines for the Clinical Management of Cerebral Cavernous Malformations: Consensus Recommendations of the Angioma Alliance Scientific Advisory Board Based on Systematic Literature Review
Tania Rebeiz, University of Chicago

2:35  10-Minute Discussion

2:45  **COFFEE BREAK**

**Session IV | Clinical Trial Panel Discussion**

Moderator – Amy Akers, Angioma Alliance

2:55  Amy Akers – Introduction and Overview

3:00  Connie Lee – Patient Engagement & Recruitment

3:10  Issam Awad – Models of Potential Clinical Trials, Imaging Biomarkers & Outcomes

3:20  Kevin Whitehead – Animal models & Physiological Biomarkers

3:30  Claudia Moy – Study Design & funding opportunities

3:40  Kathryn O’Connell – FDA Requirements for IND submission and trial initiation: are we ready?

3:50  Lisa McKerracher – From your experience, what makes a successful public-private partnership?

4:00  Leslie Morrison – Effect of statin treatment on Permeability with CCM1-CHM, Future studies

4:10  Open Discussion

5:00  **END OF DAY 1 REGULAR SESSIONS**

6:30  **DINNER & KEYNOTE ADDRESS, WHITE OAK B**

Dr. Francis Collins, National Institutes of Health Director

**Sponsorship provided by:**
### Day 2 | Friday, November 7th, 2014

#### Session V | Signaling & Vascular Biology

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<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter, Institution</th>
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<tbody>
<tr>
<td>8:30</td>
<td>CCM Proteins control endothelial B1 integrin dependent response to shear stress</td>
<td>Eva Faurobert, INSERM Grenoble</td>
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<td>8:50</td>
<td>KRIT1 depletion modifies endothelial cell behavior via increased VEGF signaling</td>
<td>Peter DiStefano, University of Rochester</td>
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<td>9:10</td>
<td>CCM3 regulates EC/pericyte interactions and vascular integrity</td>
<td>Huanjiao Jenny Zhou, Yale</td>
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<td>9:30</td>
<td><strong>COFFEE BREAK</strong></td>
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<tr>
<td>9:40</td>
<td>The cerebral cavernous malformation pathway controls cardiac development through regulation of MEKK3</td>
<td>Zinan Zhou, University of Pennsylvania</td>
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<td>10:00</td>
<td>The CCM proteins are required for cardiac outflow tract development</td>
<td>Kevin Whitehead, University of Utah</td>
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<td>10:20</td>
<td>20-Minute Discussion</td>
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#### Session VI | CCM protein Structure, Function & Signaling Networks

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<tbody>
<tr>
<td>10:40</td>
<td>RhoA mediated cytoskeletal defects disrupt cell adhesion and cytokine signaling leading to CCM</td>
<td>Adriana Beltran, UNC-Chapel Hill</td>
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<td>11:00</td>
<td>Defining the kri-1/ccm1 apoptosis pathway in C. elegans</td>
<td>Eric Chapman, University of Toronto</td>
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<td>11:20</td>
<td>Mapping and Determining the Functional Significance of the CCM2:CCM3 Interaction</td>
<td>Kyle Draheim, Yale</td>
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<td>15-Minute Discussion</td>
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<td>Noon</td>
<td><strong>LUNCH, WHITE OAK B</strong></td>
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<td>1:00</td>
<td>Loss of ccm-3 affects multiple signaling pathways regulating C. elegans germline development: a possible explanation for excessive aggressiveness associated with CCM3 mutation</td>
<td>Swati Pal, The Hospital for Sick Children</td>
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<td>1:20</td>
<td>The role of CCM3 in gliogenesis</td>
<td>Angeliki Louvi, Yale</td>
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<td>1:40</td>
<td>CCM3-Mst4-Erk1/2 axis in modulation of brain endothelial barrier integrity and CCM3 lesion formation</td>
<td>Anuska Andejelkovic, University of Michigan</td>
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<td>2:00</td>
<td>A comprehensive proteomic characterization of CCM3 Complexes</td>
<td>Anne-Claude Gingras, Lunenfeld-Tanenbaum Research Institute</td>
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<td>2:20</td>
<td>20-Minute Discussion</td>
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<td>2:40</td>
<td>Closing Remarks – Amy Akers, Angioma Alliance</td>
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<td>2:45</td>
<td>End of 2014 CCM Scientific Meeting</td>
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